L82 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:173845 CAPLUS
DN 134:206979
ED Entered STN: 14 Mar 2001
TI Micronized mineral dispersions, their manufacture, and mineral-enriched food
IN Akai, Yoshihito; Kageyama, Ryoji; Nishitani, Tsuguaki
PA Snow Brand Milk Products Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A23L001-304
ICS A23L002-52; A23C009-13; A23C009-152; A23L002-38
CC 17-6 (Food and Feed Chemistry)
Section cross-reference(s): 18
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2001061443	A2	20010313	JP 1999-237858	19990825 <--
PRAI JP 1999-237858		19990825		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2001061443	ICM	A23L001-304
	ICS	A23L002-52; A23C009-13; A23C009-152; A23L002-38

AB The dispersions comprising fats and oils and micronized minerals dispersed therein are manufactured by micronizing minerals and adding the minerals with a solution of oils and fats and emulsifiers or by adding minerals to a solution of oils and fats and emulsifiers and micronizing the minerals. Sunsoft Q 182S (polyglycerin fatty acid esters) was dissolved in ODO (medium-chain triglyceride), mixed with MgCO3, and then homogenized at 400 kgf/cm2 to give a dispersion containing micronized MgCO3 (average particle size 0.3 μm). Milk containing the dispersion at 10% was stored at 10° for 2 wk to show no precipitation
ST micronized mineral oil dispersion food additive; magnesium carbonate micronized triglyceride dispersion food additive
IT Glycerides, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(C8-10; ODO, manufacture of oil-and-fat-based dispersions of micronized minerals for mineral-enriched food)
IT Disperse systems
Dispersing agents
Health food
Milk preparations
(manufacture of oil-and-fat-based dispersions of micronized minerals for mineral-enriched food)
IT Fats and Glyceridic oils, biological studies
Mineral elements, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(manufacture of oil-and-fat-based dispersions of micronized minerals for mineral-enriched food)
IT Fatty acids, biological studies
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(tallow, hydrogenated, esters with sucrose, DK-Ester F 110, dispersing agent; manufacture of oil-and-fat-based dispersions of micronized minerals for mineral-enriched food)
IT 12764-60-2, Sunsoft Q 182S
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(dispersing agent; manufacture of oil-and-fat-based dispersions of

micronized minerals for mineral-enriched food)
IT 546-93-0, Magnesium carbonate 1309-48-4, Magnesium oxide, biological studies 16389-88-1, Dolomite, biological studies 263385-92-8, SMP 500
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(manufacture of oil-and-fat-based dispersions of micronized minerals for mineral-enriched food)
RN 12764-60-2
RN 546-93-0
RN 1309-48-4
RN 16389-88-1
RN 263385-92-8

L82 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN
AN 2001-263871 [27] WPIX
DNC C2001-079519
TI Dispersion liquid for food products, is obtained by dispersing micronized mineral into fats and oils.
DC D13
PA (SNOW) SNOW BRAND MILK PROD CO LTD
CYC 1
PI JP 2001061443 A 20010313 (200127)* 7 A23L001-304 <--
ADT JP 2001061443 A JP 1999-237858 19990825
PRAI JP 1999-237858 19990825
IC ICM A23L001-304
ICS A23L002-52
ICA A23C009-13; A23C009-152; A23L002-38
AB JP2001061443 A UPAB: 20010518
NOVELTY - The dispersion liquid is obtained by dispersing micronized minerals into fats and oils.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for manufacture of micronized mineral containing dispersion liquid.
USE - For foods and beverages.
ADVANTAGE - Even when micronized mineral is added, the food and beverages have excellent taste. The mineral is dispersed stably and the precipitation of the mineral is prevented.
Dwg.0/0
FS CPI
FA AB
MC CPI: D03-C

L82 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN
AN 2001-061443 JAPIO
TI FINELY DISPERSED MINERAL LIQUID AND ITS PRODUCTION
IN AKAI YOSHIHITO; KAGEYAMA RYOJI; NISHITANI TSUGUAKI
PA SNOW BRAND MILK PROD CO LTD
PI **JP 2001061443** A 20010313 Heisei
AI JP 1999-237858 (JP11237858 Heisei) 19990825
PRAI JP 1999-237858 19990825
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2001
IC ICM A23L001-304
ICS A23L002-52
ICA A23C009-13; A23C009-152; A23L002-38
AB PROBLEM TO BE SOLVED: To obtain a finely dispersed mineral liquid giving no bitter taste and astringent taste when added to a food or drink, having excellent seasoning property, dispersion stability and storage stability and useful for health food, etc. by dispersing minerals in oils and fats in finely dispersed state.
SOLUTION: This liquid dispersion contains a mineral such as magnesium, calcium, zinc and copper dispersed in oils and fats such as a medium-chain fatty acid triglyceride in finely dispersed state. Preferably, the average particle diameter of the finely dispersed mineral is <=0.77 μm and the finely dispersed mineral liquid contains 30-90 weight% oil and fat, 0.3-30 weight% emulsifier having an HLB of >=7 such as glycerol fatty acid ester and

5-40 weight% minerals. The dispersed mineral liquid is preferably produced by finely dividing a mineral and adding and mixing the mineral to a solution of oil and fat and an emulsifier.

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